



Complete Summary

TITLE

Heart failure: percent of patients discharged home with written instructions or educational material given to patient or caregiver at discharge or during the hospital stay addressing all of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen.

SOURCE(S)

Specifications manual for national hospital inpatient quality measures, version 3.0c. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2009 Oct 1. various p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percent of heart failure patients discharged home with written discharge instructions or educational material given to patient or caregiver at discharge or during the hospital stay addressing *all* of the following: activity level, diet, discharge medications, follow-up appointment, weight monitoring, and what to do if symptoms worsen.

RATIONALE

Patient non-compliance with diet and medications is an important reason for changes in clinical status. Health care professionals should ensure that patients and their families understand their dietary restrictions, activity recommendations,

prescribed medication regimen, and the signs and symptoms of worsening heart failure. National guidelines strongly support the role of patient education. Despite this recommendation, comprehensive discharge instructions are rarely provided to eligible older patients hospitalized with heart failure.

PRIMARY CLINICAL COMPONENT

Heart failure; discharge instructions

DENOMINATOR DESCRIPTION

Heart failure patients discharged to home or home care or discharged/transferred to court/law enforcement (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Heart failure patients with documentation that they or their caregivers were given written discharge instructions or other educational material addressing *all* of the following:

- Activity level
- Diet
- Discharge medications
- Follow-up appointment
- Weight monitoring
- What to do if symptoms worsen

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [ACC/AHA 2005 guideline update for the diagnosis and management of chronic heart failure in the adult. A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines \(Writing Committee to Update the 2001 Guidelines for the Evaluation and Management of Heart Failure\).](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Overall poor quality for the performance measured
Use of this measure to improve performance

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Bonow RO, Bennett S, Casey DE Jr, Ganiats TG, Hlatky MA, Konstam MA, Lambrew CT, Normand SL, Pina IL, Radford MJ, Smith AL, Stevenson LW, Bonow RO, Bennett SJ, Burke G, Eagle KA, Krumholz HM, Lambrew CT, Linderbaum J, Masoudi FA, Normand SL, Ritchie JL, Rumsfeld JS, Spertus JA, American College of Cardiology, American Heart Association Task Force on Performance Measures (Writing Committee), Heart Failure Society of America. ACC/AHA clinical performance measures for adults with chronic heart failure. J Am Coll Cardiol 2005 Sep 20;46(6):1144-78. [PubMed](#)

Heart Failure Society of America. HFSA 2006 comprehensive heart failure practice guideline. J Card Fail 2006 Feb 1;12(1):e1-2. [PubMed](#)

Hunt SA, American College of Cardiology, American Heart Association Task Force on Practice Guidelines (Writing Committee. ACC/AHA 2005 guideline update for the diagnosis and management of chronic heart failure in the adult. J Am Coll Cardiol 2005 Sep 20;46(6):e1-82. [174 references] [PubMed](#)

Specifications manual for national hospital inpatient quality measures, version 3.0b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2009 Oct. various p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Collaborative inter-organizational quality improvement
External oversight/Medicaid
External oversight/Medicare
Internal quality improvement
National reporting
Pay-for-performance

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

- Around 5 million people in the United States have heart failure. About 550,000 new cases are diagnosed each year. More than 287,000 people in the United States die each year with heart failure.
- Hospitalizations for heart failure have increased substantially. They rose from 402,000 in 1979 to 1,101,000 in 2004. (National Hospital Discharge Survey)
- Heart failure is the most common reason for hospitalization among people on Medicare. Hospitalizations for heart failure are higher in black than white people on Medicare.
- Persons living with heart failure can improve their quality of life and outcomes by the following:
 - Taking prescribed medications as recommended each day.
 - Reducing their dietary intake of salt (sodium).
 - Getting daily physical activity as recommended by their health provider.
 - Being aware of and telling their health provider about their heart failure symptoms.
 - Taking and keeping track of their weight every day to check fluid buildup in the body and telling their health provider of changes in weight over a short time.
 - Learning ways to deal with depression and stress and get treatment if needed.
 - Making living wills to state their wishes for care to health care providers and their family members.

EVIDENCE FOR INCIDENCE/PREVALENCE

American Heart Association. Heart disease and stroke facts, 2006 update. Dallas (TX): AHA; 2006.

Centers for Disease Control and Prevention. The burden of heart disease and stroke in the United States: state and national data, 1999. Atlanta (GA): Centers for Disease Control and Prevention; 2004.

Elixhauser A, Yu K, Steiner C, Bierman AS. Table 4. Most common reasons for hospitalizations by age groups. In: Hospitalization in the United States, 1997. HCUP fact book (AHRQ Publication No. 00-0031). Rockville (MD): Agency for Healthcare Research and Quality; 2000.

Grady KL, Dracup K, Kennedy G, Moser DK, Piano M, Stevenson LW, Young JB. Team management of patients with heart failure: A statement for healthcare professionals from The Cardiovascular Nursing Council of the American Heart Association. *Circulation* 2000 Nov 7;102(19):2443-56. [PubMed](#)

National Heart, Lung, and Blood Institute. Diseases and conditions index, heart failure. [internet]. Bethesda (MD): National Heart, Lung, and Blood Institute; 2007 Dec [accessed 2008 Nov 17].

ASSOCIATION WITH VULNERABLE POPULATIONS

See the "Incidence/Prevalence" field.

BURDEN OF ILLNESS

See the "Incidence/Prevalence" field.

UTILIZATION

See the "Incidence/Prevalence" field.

COSTS

The estimated direct cost for heart failure in 2006 is \$29.6 billion in the United States.

EVIDENCE FOR COSTS

American Heart Association. Heart disease and stroke facts, 2006 update. Dallas (TX): AHA; 2006.

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Discharges, 18 years of age and older, with a principal diagnosis of heart failure

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Discharges, 18 years of age and older, with an International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) Principal Diagnosis Code for heart failure as defined in Appendix A, Table 2.1, of the original measure documentation, who are discharged to home or home care or discharged/transferred to court/law enforcement

Exclusions

- Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-9-CM procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2)
- Patients less than 18 years of age
- Patients who have a Length of Stay greater than 120 days
- Patients enrolled in clinical trials
- Patients with *Comfort Measures Only* documented

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition
Institutionalization

DENOMINATOR TIME WINDOW

Time window brackets index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Heart failure patients with documentation that they or their caregivers were given

written discharge instructions or other educational material addressing *all* of the following:

- Activity level
- Diet
- Discharge medications
- Follow-up appointment
- Weight monitoring
- What to do if symptoms worsen

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Institutionalization

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

The core measure pilot project was a collaboration among The Joint Commission, five state hospitals associations, five measurement systems, and 83 hospitals from across nine states. Participating hospitals collected and reported data for heart failure (HF) measures from December 2000 to December 2001.

Core measure reliability visits were completed the summer of 2001 at a random sample of 16 participating hospitals across 6 states.

During the pilot project, several participants believed this measure afforded them the greatest opportunity for quality improvement initiatives within their institution. This is substantiated by the overall pilot project data; the mean rate for this measure was 28%.

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

The Joint Commission. A comprehensive review of development and testing for national implementation of hospital core measures. Oakbrook Terrace (IL): The Joint Commission; 40 p.

Identifying Information

ORIGINAL TITLE

HF-1: discharge instructions.

MEASURE COLLECTION

[National Hospital Inpatient Quality Measures](#)

MEASURE SET NAME

[Heart Failure](#)

SUBMITTER

Centers for Medicare & Medicaid Services
Joint Commission, The

DEVELOPER

Centers for Medicare & Medicaid Services/The Joint Commission

FUNDING SOURCE(S)

All external funding for measure development has been received and used in full compliance with The Joint Commission's Corporate Sponsorship policies, which are available upon written request to The Joint Commission.

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

The composition of the group that developed the measure is available at:
<http://www.jointcommission.org/NR/rdonlyres/40EDE16E-0ECC-45E0-8CEC-71C97FF515D0/0/CardiovascularConditionsClinicalAdvisoryPanel.pdf>.

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Expert panel members have made full disclosure of relevant financial and conflict of interest information in accordance with the Conflict of Interest policies, copies of which are available upon written request to The Joint Commission and the Centers for Medicare & Medicaid Services.

ENDORSER

National Quality Forum

INCLUDED IN

Hospital Compare
Hospital Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2000 Aug

REVISION DATE

2009 Oct

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Specifications manual for national hospital quality measures, version 2.5b. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2008 Oct. various p.

SOURCE(S)

Specifications manual for national hospital inpatient quality measures, version 3.0c. Centers for Medicare & Medicaid Services (CMS), The Joint Commission; 2009 Oct 1. various p.

MEASURE AVAILABILITY

The individual measure, "HF-1: Discharge Instructions," is published in the "Specifications Manual for National Hospital Inpatient Quality Measures." This document is available in Portable Document Format (PDF) from [The Joint Commission Web site](#). Information is also available from the [Centers for Medicare & Medicaid Services \(CMS\) Web site](#). Check The Joint Commission Web site and CMS Web site regularly for the most recent version of the specifications manual and for the applicable dates of discharge.

COMPANION DOCUMENTS

The following are available:

- A software application designed for the collection and analysis of quality improvement data, the CMS Abstraction and Reporting Tool (CART), is available from the [CMS CART Web site](#). Supporting documentation is also available. For more information, e-mail CMS PROINQUIRIES at proinquiries@cms.hhs.gov.
- The Joint Commission. A comprehensive review of development and testing for national implementation of hospital core measures. Oakbrook Terrace (IL): The Joint Commission; 40 p. This document is available from [The Joint Commission Web site](#).
- The Joint Commission. Attributes of core performance measures and associated evaluation criteria. Oakbrook Terrace (IL): The Joint Commission; 5 p. This document is available from [The Joint Commission Web site](#).
- Hospital compare: a quality tool provided by Medicare. [internet]. Washington (DC): U.S. Department of Health and Human Services; 2009 Oct 5; [accessed 2009 Oct 12]. This is available from the [Medicare Web site](#). See the related [QualityTools](#) summary.

NQMC STATUS

This NQMC summary was completed by ECRI on February 7, 2003, October 11, 2005, April 6, 2007, and October 26, 2007. The Joint Commission informed NQMC that this measure was updated on August 13, 2008 and provided an updated version of the NQMC summary. This NQMC summary was updated accordingly by ECRI Institute on November 11, 2008. The information was verified by the Centers for Medicare & Medicaid Services on January 22, 2009. The Joint Commission informed NQMC that this measure was updated again on May 19, 2009 and provided an updated version of the NQMC summary. This NQMC

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